CSCI 204: Streaming & OOP Exercise | 8/30/2017

In this class, you will act as a data scientist, importing real datasets, and analyzing them using OOP methods.

First, go to the fivethirtyeight website and pick out a dataset:
https://github.com/fivethirtyeight/data

Pick out a dataset that you find interesting and that is in .csv format. It should have at least 3 columns of data.

What is a .csv file?
A .csv is a file with *comma-separated values* used to organize information. Each line in the file is a like a row in an excel sheet. Data is separated using commas (sort of like different cells in Excel).

Work in a groupof two to three students. Your objectives:
1) **Design your data structure** to solve a question you would like to ask about the data.
   a. **Create a constructor** and identify all **data attributes**
   b. If you need computation, create a class method that will give you the information that you need

About halfway into class, I'm going to ask you to give a short presentation of your python class. At this point, you don't need to have the data from the file in your program. You should have the constructor completed, possibly a method inside the class, and be able to discuss a SIMPLE question you would like to answer (for example, the largest value or average value of something).

2) **Input the data**: write a method within the class to input the information from the file and put it into your data structure.
3) **Answer your question:** once you have all your data stored in objects, go through and find out the answer to your question. You might not finish this in class, so each group must ***email me your code before class on Friday***. The subject of your email should be "CSCI 204 oop design: your name."

Starting class on Friday, each team will briefly share what they found out from their data.